## AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph starting at Line 19 of Page 9 (beginning with "He-Ne laser 108..." and ending at Line 10 of Page 10 (ending with "to derive separate values by curve fitting.") with the following paragraph:

He-Ne laser 108 is the light source for the magneto-optical Kerr effect probe. Incident beam 110 from laser 108 is reflected by mirror 112, and passes through polarizer 114, beam splitter 116 and lens 118. Incident beam 110 is reflected at the surface of sample 100 and undergoes a polarization alteration due to the magnetization of sample 100. Reflected beam 120 passes through lens 118 and is reflected by beam splitter 116 to a detection arm that includes Wollaston prism 122 and photodiodes 124A and 124B. Wollaston prism 122, or analyzer, is used to separate polarized beam components 120A and 120B of reflected beam 120. Photodiodes 124A and 124B provide positive and negative input signals to differential amplifier 126. The output of differential amplifier 126 is a signal representing a difference in intensity of components 120A and 120B of reflected beam 120, which is proportional to the change of magnetization induced by the AC field. Lock-in amplifier 128, using as inputs a sync signal from function generator 104 and the output signal from differential amplifier 126, can determine the real and imaginary components of the susceptibility. Finally, computer 122 acquires the data and derives separate values for $\sigma_V$ and $\sigma_{HK}$ from the complex transverse AC susceptibility. This derivation is possible because of the high sensitivity of the MOKE measurements and the use of a variable DC field. The differing sensitivity of the imaginary component of AC susceptibility to $\sigma_V$ and $\sigma_{HK}$ at high and low DC fields allows computer $H_D$ to derive separate values by curve fitting.